

RILCO

GLUED LAMINATED WOOD

FLAT and PITCHED BEAMS

BOWSTRING TRUSSES

TIED ARCHES

A.I.A. FILE NO. 19-K



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FLAT

LAMINATED BEAMS

TAPERED

PITCHED

DIHEDRAL

MULTI-CURVED

Rilco beams are glued laminated from kiln-dried West Coast Douglas Fir, bonded with structural glues stronger than the wood itself. They are spaced 6 to 20 ft. o.c. The narrower spacing can be spanned with 2" T & G decking, the wider spacing with 4" Rilco Deck or purlins and 2" decking. Because of their dimensional stability, Rilco beams resist warping, checking and splitting. Standard sizes of straight beams are stocked for immediate shipment.



BOWSTRING TRUSSES

Engineered for maximum efficiency, Rilcord Trusses provide economical support for wide clear spans. Laminated upper and lower chords and solid timber web members are all in the same plane. Where ceilings or concentrated loads are to be used, the trusses are designed and modified to meet requirements. All parts are completely fabricated and shipped unassembled with connection plates and assembly hardware. Pieces are marked to correspond with shop drawings to simplify assembly.



TIED ARCH

Arch spacing 2' o.c. permits nominal 1" sheathing to be nailed directly to the top edges of the arches, and ceiling can be applied to tie members. Top arch chord members are glued laminated West Coast Douglas Fir. Ties, pre-cut 1 x 4 vertical hangers and all necessary connection hardware are furnished. All members are accurately pre-cut, drilled for bolts and grooved for split ring connectors. Pieces are marked to correspond with assembly instructions. Arches are light in weight simplifying erection without need of specialized labor or special equipment.



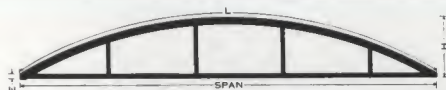
Table shows maximum allowable uniform load per lineal foot in pounds for flat, non-cambered beams based on 2400 f bending, 165 psi shear, or 1/240 span maximum deflection.

SECTION SIZE	SPAN IN FEET										
	10	12	14	16	18	20	22	24	26	28	30
3 $\frac{3}{8}$ " x 8 $\frac{1}{8}$ "	570	325	205	140							
3 $\frac{3}{8}$ " x 9 $\frac{3}{4}$ "		580	365	245	170						
5 $\frac{1}{4}$ " x 8 $\frac{1}{8}$ "		540	340	230	160	125					
3 $\frac{3}{8}$ " x 11 $\frac{3}{8}$ "		810	570	385	265	195	145				
5 $\frac{1}{4}$ " x 9 $\frac{3}{4}$ "			590	397	277	203	153	118			
5 $\frac{1}{4}$ " x 13"					645	490	352	273	215	172	
5 $\frac{1}{4}$ " x 16 $\frac{1}{4}$ "							685	530	420	335	272

Dimensions are based on typical truss design for 40 lbs. per sq. ft. total load and 20'-0" spacing. (800 lbs. per lineal ft.) Individual designs may vary.

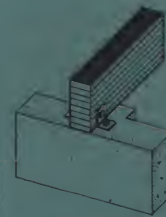
SPAN	HEIGHT OF TRUSS*	LENGTH OF ARC	WIDTH OF HEEL	LENGTH OF BEARING
40'-0"	6'-0 $\frac{5}{16}$ "	41'-10 $\frac{5}{8}$ "	6"	5"
50'-0"	7'-4 $\frac{3}{8}$ "	52'-4 $\frac{3}{8}$ "	6"	6 $\frac{1}{2}$ "
60'-0"	8'-9 $\frac{3}{4}$ "	62'-10"	6"	8"
70'-0"	10'-2 $\frac{9}{16}$ "	73'-3 $\frac{5}{8}$ "	6"	10"
80'-0"	11'-4 $\frac{5}{8}$ "	83'-9 $\frac{3}{16}$ "	8"	8"
90'-0"	12'-9 $\frac{11}{16}$ "	94'-3"	8"	9"
100'-0"	14'-1 $\frac{1}{2}$ "	104'-8 $\frac{1}{4}$ "	8"	10"
110'-0"	15'-6 $\frac{7}{8}$ "	115'-3 $\frac{1}{4}$ "	8"	11"
120'-0"	17'-0 $\frac{13}{16}$ "	125'-8"	8"	12"

*Height of truss is the vertical distance from the bearing line to top of truss at mid-span.

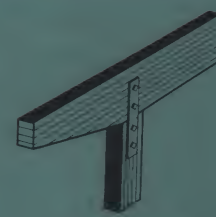


*Span & Rad.	TYPE CC 70 30 lbs./sq. ft. Live Load			TYPE BC 70 25 lbs./sq. ft. Live Load			TYPE AC 70 20 lbs./sq. ft. Live Load		
	H	E	L	H	E	L	H	E	L
30	4'-1 $\frac{3}{4}$ "	1 $\frac{1}{2}$ "	31'-6 $\frac{1}{2}$ "	4'-1 $\frac{3}{4}$ "	1 $\frac{1}{2}$ "	31'-6 $\frac{1}{2}$ "	4'-1 $\frac{3}{4}$ "	1 $\frac{1}{2}$ "	31'-6 $\frac{1}{2}$ "
40	5'-5 $\frac{11}{16}$ "	1 $\frac{3}{8}$ "	42'-0 $\frac{1}{16}$ "	5'-5 $\frac{11}{16}$ "	1 $\frac{3}{8}$ "	42'-0 $\frac{1}{16}$ "	5'-5 $\frac{7}{8}$ "	1 $\frac{9}{16}$ "	42'-0 $\frac{1}{4}$ "
50	6'-10 $\frac{5}{16}$ "	1 $\frac{13}{16}$ "	52'-6 $\frac{1}{4}$ "	6'-10 $\frac{1}{4}$ "	1 $\frac{7}{8}$ "	52'-6 $\frac{1}{4}$ "	6'-10 $\frac{3}{16}$ "	2 $\frac{1}{16}$ "	52'-6 $\frac{3}{8}$ "
60	8'-3 $\frac{3}{4}$ "	3 $\frac{5}{16}$ "	63'-1 $\frac{5}{16}$ "	8'-3 $\frac{11}{16}$ "	3 $\frac{1}{4}$ "	63'-1 $\frac{1}{4}$ "	8'-3 $\frac{3}{4}$ "	2 $\frac{13}{16}$ "	63'-0 $\frac{7}{8}$ "
70	9'-7 $\frac{3}{4}$ "	3 $\frac{3}{16}$ "	73'-6 $\frac{13}{16}$ "	9'-8 $\frac{1}{2}$ "	3 $\frac{15}{16}$ "	73'-7 $\frac{5}{8}$ "	9'-8 $\frac{1}{16}$ "	3 $\frac{1}{2}$ "	73'-7 $\frac{1}{8}$ "
80	11'-1 $\frac{1}{8}$ "	4 $\frac{1}{2}$ "	84'-1 $\frac{3}{4}$ "	11'-0 $\frac{7}{16}$ "	3 $\frac{13}{16}$ "	84'-1 $\frac{1}{8}$ "	11'-0 $\frac{1}{8}$ "	3 $\frac{1}{2}$ "	84'-0 $\frac{13}{16}$ "

*Standard Tied Arches are available in span intervals of 2'.
ALL DIMENSIONS ARE + OR -



MASONRY WALL



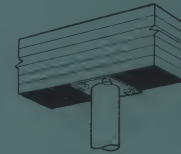
LAMINATED COLUMN



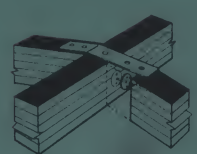
LAMINATED COLUMN



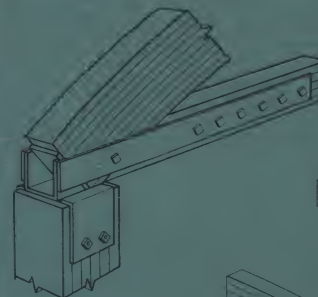
FRAME WALL



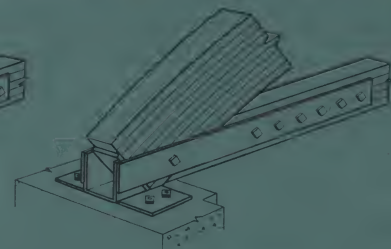
STEEL COLUMN



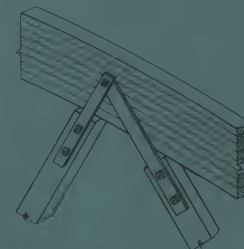
RIDGE BEAM



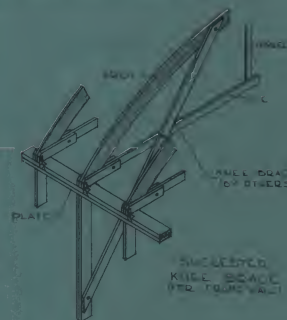
LAMINATED COLUMN



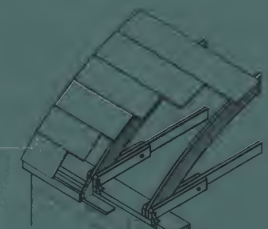
MASONRY WALL



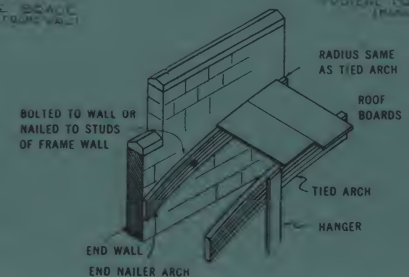
TYPICAL WEB TO CHORD CONNECTION



WALLED BRACE FOR STRESSES

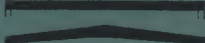
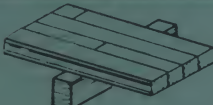


ROOF BOARDING SYSTEM (MASONRY WALL)



RADIUS SAME AS TIED ARCH
ROOF BOARDS
TIED ARCH
HANGER
END WALL
END NAILER ARCH

OTHER PRODUCTS

TYPICAL SHAPES	USES	SPANS	CENTER-TO-CENTER SPACING	ADVANTAGES
 TANGENT ARCHES	Churches Gymnasiums Chapels Theaters	24' to 100'	8' to 20'	Arch and laminated purlins gives unsurpassed beauty, without expensive veneering. Fire resistant. Made of kiln-dried Douglas Fir selected for strength and appearance.
 RADIAL ARCHES	Gymnasiums Hangars Auditoriums Armories Skating Rinks Bowling Alleys	40' to 120'	8' to 20'	Graceful arches have the clean, natural beauty of fine wood. Wide, clear spans give large unobstructed space without unsightly framework. Fire resistant. Efficient design makes a building that is economical to erect.
 STRAIGHT  ARCHED-PITCHED LAMINATED WOOD BEAMS	One-story Schools Stores Offices Residences Gymnasiums Industrial Buildings	20' to 60'	6' to 20'	Resists checking and warping and other seasoning defects common to solid timber. Fire resistant. Combines structural and decorative advantages for economy.
 BOWSTRING TRUSSES	Wide, Clear-Span Buildings Garages Factories Hangars Warehouses Gymnasiums	24' to 200'	8' to 20'	Well adapted to wide, clear-span construction. Economical. Designed for specific requirements such as concentrated loads, hoists, etc.
 TIED ARCHES	Stores Factories Theaters Warehouses Hangars	24' to 100'	2'	Light enough to erect without special equipment. One inch roof sheathing can be nailed to top of arch with ceiling material nailed directly to lower tie.
 UTILITY ARCHES	Small Hangars Warehouses Gymnasiums Theaters Community Buildings	28' to 80'	2' to 20'	Easy to plan. Economical. Combines sidewall and roof in one piece for easy erection. Requires no costly field assembly. Any type of roofing can be applied over sheathing.
 ALL TYPES STRUCTURAL ASSEMBLIES	Bridges Buildings Bulkheads Culverts Docks Falsework Floats Grandstands Ramps Outdoor Theater Screens Retaining Walls Shipways	our service engineers will gladly consult with you		Designed for specific loads, precision manufactured by skilled workmen of structural timber. Cut to exact lengths, holes bored for all connections — bolts and hardware furnished. Delivered when promised for erection by local crews.
 RILCO DECK	Churches Gymnasiums Schools Auditoriums Stores Offices Homes Industrial Buildings	12' to 18'	SIZES Random Lengths — Full 5 1/4" wide by 3 1/2" thick. Also nominal 3" x 6" and 2" x 6".	Rilco Deck is milled from solid western red cedar or light colored species. Double tongue and grooved pieces are spiked through pre-drilled holes to form slab. Serves as sheathing, insulation, ceiling — economical, fire safe construction.



RILCO LAMINATED PRODUCTS, INC.

Charter Member of American Institute of Timber Construction

W-891 First Nat'l Bank Bldg. 3753 Northrop St.
St. Paul 1, Minn. Fort Wayne, Ind.

155 Washington St.
Newark 2, N. J.

233 Tacoma Building
Tacoma 1, Wash.

OTHER PUBLICATIONS

- ☐ Church Construction, 8 pages
- ☐ School Construction, 8 pages
- ☐ Rilcord Trusses, 4 pages
- ☐ Tied Arches, 8 pages
- ☐ Glued Laminated & Solid Wood Products, 24 pages
- ☐ Distinctive Beauty (House Beams), 4 pages
- ☐ Structural Wood Products, 12 pages
- ☐ Trusdek, 4 pages